

LCN2 (D4M8L) Rabbit mAb

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Applications: W, IHC-P	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 22	Source/Isotype: Rabbit IgG	UniProt ID: #P80188	Entrez-Gene Id: 3934
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Product Usage Information**Application**

Western Blotting
Immunohistochemistry (Paraffin)

Dilution

1:1000
1:3000 - 1:12000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

LCN2 (D4M8L) Rabbit mAb recognizes endogenous levels of total LCN2 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala73 of human LCN2 protein.

Background

Lipocalin 2 (LCN2), also known as neutrophil gelatinase-associated lipocalin (NGAL), belongs to the lipocalin family. Proteins in this family exhibit considerable sequence diversity, but share a highly conserved structure composed of an eight-stranded antiparallel beta-barrel that encloses an internal ligand-binding site (1,2). LCN2 is considered as an iron transporter. LCN2 can bind bacterial siderophores and inhibits bacterial growth by iron depletion (3). It can also bind endogenous compounds like catechol in complex with iron (4). LCN2 was originally identified in neutrophils, and its expression was induced in many other tissues like kidney and liver in response to various pathologic states, such as infection, ischemia, and acute kidney injury. LCN2 is considered a biomarker for conditions like ischemic stroke, acute kidney injury, inflammatory and metabolic diseases (5-7).

Background References

1. Flower, D.R. (1996) *Biochem J* 318 (Pt 1), 1-14.
2. Grzyb, J. et al. (2006) *J Plant Physiol* 163, 895-915.
3. Goetz, D.H. et al. (2002) *Mol Cell* 10, 1033-43.
4. Bao, G. et al. (2010) *Nat Chem Biol* 6, 602-9.
5. Haase-Fielitz, A. et al. (2014) *Ann Clin Biochem* 51, 335-51.
6. Abella, V. et al. (2015) *Biomarkers* 20, 565-71.
7. Hochmeister, S. et al. (2016) *PLoS One* 11, e0154797.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)

Cross-Reactivity Key

H: Human

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